WHAT IS CLAIMED IS:

1. A communication connecting device connected at one end to a first terminal unit and connected at the other end to a second terminal unit via an IP network, and selectively operable with a plurality of communication standards adaptive to said first terminal unit, said second terminal unit and said IP network for thereby implementing real-time communication, said device comprising:

a terminal unit control circuit for storing data received from the first terminal unit or the second terminal unit, and controlling said first terminal unit in accordance with a first communication standard;

a first storage storing size information representative of a size of data to be coded;

a coding/decoding circuit for collectively coding the data in accordance with the size information read out of said first storage and the first communication standard or decoding coded data received from the second terminal unit in accordance with said first communication standard and determining whether said coded data decoded is a response to data sent from the first terminal unit or retransmitted data;

a second storage for storing, assuming a loss of the coded data output from said coding/decoding circuit, said coded data;

an information adding/separating circuit for filtering, when adding a header and data for making up for the loss of the coded data assumed to the coded data in accordance with a second communication standard that relates to the IP network, said data in response to a response detection signal output from said coding/decoding circuit and representative of the response or separating coded data from data received from the second terminal unit and feeding said coded data separated to said coding/decoding circuit; and

an interfacing circuit for converting the coded data input

via said information adding/separating circuit to a signal based on a command or converting a signal received from the second terminal unit to the coded data.

2. The device in accordance with claim 1, wherein said coding/decoding circuit comprises a response decision circuit for determining whether the coded data decoded is a response to the data sent or retransmitted data and outputting said response detection signal in accordance with a result of a decision.

3. The device in accordance with claim 1, wherein said information adding/separating circuit comprises a data deleting circuit for deleting, when said response detection signal is representative of the response, the coded data written to said second storage on the assumption of the loss.

4. The device in accordance with claim 2, wherein said information adding/separating circuit comprises a data deleting circuit for deleting, when said response detection signal is representative of the response, the coded data written to said second storage on the assumption of the loss.

5. The device in accordance with claim 4, wherein the first communication standard and the second communication standard respectively correspond to ITU-T Recommendation T.30 (revised in 1996) and Recommendation T.38 (June/1998), and wherein at least one of said first terminal unit and said second terminal unit comprises a G3 (Group 3) facsimile apparatus corresponding to Recommendation T.30 (revised in 1996).

6. A data output control method for a communication connecting device connected at one end to a first terminal

unit and connected at the other end to a second terminal unit via an IP network, and selectively operable with a plurality of communication standards adaptive to said first terminal unit, said second terminal unit and said IP network for thereby implementing real-time communication, said method comprising:

a first step of storing data received from the first terminal unit or the second terminal unit;

a second step of outputting size information representative of a size of data to be coded;

a third step of collectively coding the data in accordance with the read out size information and a first communication standard;

a fourth step of storing the coded data on the assumption of a loss of said coded data;

a fifth step of separating, among data received from the second terminal unit, coded data, decoding said coded data, determining whether said coded data decoded is a response to data sent from the first terminal unit or retransmitted data, and outputting a response detection signal in accordance with a result of a decision;

a sixth step of selectively executing, in accordance with said response detection signal, first filtering that reads out, in accordance with a second communication standard relating to the IP network, a header for the coded data and the coded data stored on the assumption of the loss of said coded data and adds said header and said coded data to newly input coded data, or second filtering that deletes the coded data currently stored; and

a seventh step of converting the coded data to a signal based on a command and outputting said signal.

7. The method in accordance with claim 6, wherein the sixth step comprises:

an eighth step of reading out the coded data stored and adding said coded data to newly input coded data;

a ninth step of executing said second filtering for deleting the coded data currently stored; and

a tenth step of outputting a result of either one of said eighth step and said ninth step in accordance with said response detection signal.

8. The method in accordance with claim 7, wherein the first communication standard and the second communication standard respectively correspond to ITU-T Recommendation T.30 (revised in 1996) and Recommendation T.38 (June/1998), and wherein at least one of said first terminal unit and said second terminal unit comprises a G3 facsimile apparatuses corresponding to Recommendation T.30 (revised in 1996).